

ABSTRACT

The invention describes a self-renewing, phenotypically homogeneous population of oligodendrocyte precursor cells having a synchronized developmental stage and methods of obtaining a self-renewing phenotypically homogeneous population of oligodendrocyte precursor cells. Other methods include methods of maintaining and storing a homogeneous population of oligodendrocyte precursor cells for a prolonged period of time without change in the characteristics of the cells and methods of dedifferentiating oligodendrocyte precursor cells. The self-renewing, phenotypically homogeneous population of oligodendrocyte precursor cells or homogeneous population of oligodendrocytes may be useful for treating a patient having a CNS disorder or condition.